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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, TRONG NHAN P	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,287	MCNABB ET AL.	
	Examiner	Art Unit	
	Jack P Nguyen	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-45 are being examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Clark et al, WO 01/22725 (Clark hereafter).

As per claim 1, Clark teaches a system for managing a plurality of participants (TV1 and TV2, fig. 1) to a event comprising: a director (DSA, fig. 2; *District Secondary Array (DSA) is functionally equivalent to a director controlling data transmissions between the content providers (MCO1, fig. 2) and the clients*) having an address associated therewith for delivering the event to the plurality of participants (abstract); a plurality of participant managers (LTC, fig. 2; *LTC is equivalent to a participating manager*) installed within a network communication system and logically connected amongst themselves and to said director thereby forming a hierarchy (page 13, 3rd paragraph; *LTCs (local managers) are coupled to DSA (district directors) forming a*

network hierarchical structure); and a turnstile (STB1, fig. 1; *set-top-box is functionally equivalent to a turnstile*) installed at and associated with each of the plurality of participants (fig. 1; *each cluster comprises of a plurality of clients*), each turnstile logically connected to one of said plurality of participant managers (LTC, fig. 2) in said hierarchy (fig. 2; *see network hierarchical reference above*), wherein said turnstile identifies one or more network elements in a communication path between said turnstile and said director (DSA, fig. 2), and wherein said director logically connects said turnstile with a particular one of said plurality of participant managers (LTC, fig. 2) based on said one or more network elements between said turnstile and said director (page 13, 3rd paragraph; clusters are grouped into regions; each region comprises a plurality of local sites or managers; each manager further comprises of a plurality of clients).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swildens et al, 6,754,699 (Swildens hereafter) in view of Clark et al, WO 01/22725 (Clark hereafter).

As per claim 1, Swildens teaches a system for managing a plurality of participants (111, fig. 1) to a event comprising: a director (105, fig. 1; global traffic

management system (TMS) is functionally equivalent to a director) having an address associated therewith for delivering the event to the plurality of participants (col. 5, lines 1-5; *TMS regulates content delivery from content providers (107, fig. 1) to clients via a plurality of servers (104, 115, fig. 1)*); a plurality of participant managers (113 & 115, fig. 1; *local DNS server is functionally equivalent to participants manager*) installed within a network communication system and logically connected amongst themselves and to said director thereby forming a hierarchy (fig. 1; *local DNS servers process requests from plurality of clients distributed across the networks; local DNS servers connect to central TMS forming a hierarchy*); participant (111, fig. 1) is logically connected to one of said plurality of participant managers (113, fig. 1) in said hierarchy, wherein said participant identifies one or more network elements (115, fig. 1) in a communication path (125, fig. 1) between said participant and said director, and wherein said director logically connects said participant with a particular one of said plurality of participant managers (115, fig. 1) based on said one or more network elements between said participant and said director (see fig. 1 for connection relationship between the participant, manager, and director in the network hierarchy). Swildens does not explicitly teach a turnstile installed at each participant. Clark teaches a set-top-box (STB1, fig. 1; set-top-box is functionally equivalent to a turnstile) installed at each client (TV1, fig. 1) residing in a network cluster (cluster C3, fig. 1) coupled to a local manager (LTC, fig. 2; LTC is equivalent to a participating manager) that is then coupled to a district director (DSA, fig. 2; District Secondary Array (DSA) is functionally equivalent to a director controlling data between the local manager and the clients) connected over a

distributed network (fig. 2) forming a network hierarchical structure. Hence, it would have been obvious to one of ordinary skill in the art to modify and combine the teachings of Swildens and Clark to include some form of security infrastructure (device or software such as set-top-box) that allow the clients to decode, decrypt, or manage content data sent from content providers via a plurality of hierarchical means (page 18, 2nd paragraph).

As per claims 2 and 3, Swildens teaches the DNS server (participant manager) collects delivery statistics and provides metrics on the traffic data between the clients and a plurality of servers on the network (col. 6, lines 12-18). Swildens also teaches recording delivery statistics in log files for viewing and analysis (col. 8, lines 7-9 and 17-19). Statistical data are propagated upstream in a hierarchy to global traffic management server (TMS or director as noted in claim 1 above) (col. 8, lines 54-60).

Claims 4-10 are rejected on similar rationale as claims 1 and 2.

Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al, 6,505,254 (Johnson hereafter).

As per claim 11, Johnson teaches a method for organizing a plurality of participants (14, fig. 1; client browsers) and a plurality of participant managers (12, fig. 1; local router) in a hierarchy under a director (16, fig. 1; root router is functionally equivalent to director) comprising: receiving a message from a sending child router (12, fig. 1; *one of the routers now designates as child router*) at a receiving root router (16, fig. 1; *root router serves as parent node in the hierarchy*), said sending child router and

said receiving root router included in the plurality of child routers, said message including a request to join the existing hierarchy under the root router (200, fig. 1, col. 11, lines 48-55); determining whether said receiving root router should be attached in the hierarchy to said sending child router based on performance criteria of sending child router (col. 11, lines 55-59; *child router is lower in the hierarchy then root router; root router sends child router a request for performance criteria in response to child router's joining request*); and if root router does not have any child routers, attaching said child router to said root router thereby forming the hierarchy (col. 11, lines 60-64). Johnson does not teach child router sending its level within the hierarchy to root router. However, it would have been obvious to one of ordinary skill in the art to be motivated to disclose a variation of the Johnson teachings for a system to dynamically register or re-register itself into an existing hierarchy if there are changes in the topology of the hierarchy (col. 13, lines 16-19) and promote load balancing within the hierarchy (col. 5, lines 17).

Claims 12-16 are rejected on similar basis as claim 11 address above. Johnson further teaches the child router further searches to attach itself to other routers within the hierarchy based on its performance data compare to others within the hierarchy (206, 207, fig. 1, col. 11, lines 63 – col. 12, lines 1). If child router has higher performance data then other routers within the hierarchy, child router attaches itself to the root router (col. 12, lines 7-12). If not, child router repeats the process with the other routers within the hierarchy (col. 12, lines 3-7).

Claims 17-21 are rejected on similar basis as claims 11-16 above. Johnson further teaches the child routers periodically re-register themselves using the same registration process described in claim 11 and may detach themselves from existing routers and attach themselves to different routers within the hierarchy (col. 13, lines 7-10 and 13-15).

Claims 22-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al, WO 01/22725 (Clark hereafter) in view of Swildens et al, 6,754,699 (Swildens hereafter).

As per claim 22, Clark teaches a method for gating a participant access to an event comprising: determining whether the participant has a ticket (SC1, fig. 1; *smart card contains the user's access information that could be in the form of an userID and password and is equivalent to a ticket*); if the participant has a ticket, determining whether said ticket is a valid ticket; if the participant has a valid ticket, receiving information as to whether said ticket is an authentic ticket; if the participant has an authentic ticket, allowing the participant to join the event (page 25, 2nd paragraph; *the system verifies the access data obtained from the smart card with data from subscriber database server (SDB, fig. 1) to see the user is authorized to use the service. Once the user has been authenticated by the system, the user is then authorized to access subscriber-based data services*). Clark does not explicitly teach upon the participant attempting to access the event, prohibiting the participant from joining the event. However, it is well known in the art that without valid subscriber's access data (userid

and password or ticket), the system would not allow a user to access subscriber-based events. Hence, it would have been obvious to one of ordinary skill in the art to provide the user with proper access data (or ticket) when attempting to retrieve subscriber-based data.

Claims 23-26 are rejected on similar basis as claim 22 addressed above. Further, it is known in the art by preventing an event from launching at the client and intercepting an attempt by client to join an event are obvious variations of restricting a client from obtaining unauthorized access to subscriber-based data services. Conversely, by allowing a client to join the event and the client application to launch once the client is authenticated to use the services are obvious variations of granting access to the data services. Hence, it would have been obvious to one of ordinary skill in the art to use these variations in granting or preventing user access to subscriber-based data.

Claims 27-29 are rejected on similar rationale as claim 22 addressed above. Furthermore, it is well known in the art to assign a requesting client with valid access data (ticket or userID and password) in order to gain access to the system.

Claims 30 and 37 are rejected on similar rationale as claim 1 above.

Claims 31, 32, and 38 are rejected on similar rationale as claims 1 and 22 addressed above.

Claims 33-35 and 39-41 are rejected on similar rationale as claim 1. Swildens further teaches the clients send requests to the local DNS server (manager) that gets routed to the TMS (director) for processing. The TMS sends the response back to the

client via the local DNS server. The client then uses this data to access the content server (col. 5, lines 1-5, lines 20-30). Swildens does not specifically teach notifying the director and manager when the client gains access to the requested data. However, it would have been obvious to one of ordinary skill in the art to disclose an alternative of the Swildens teachings in order to inform the director and manager when the client is joining or ending the data session with the content providers for monitoring and billing purposes.

Claim 36 is rejected on similar rationale as claims 1, 22 and 33-35 addressed above.

As per claims 42-45, Swildens teaches accessing content server as stated in claims 33-35 above. Swildens further teaches content data is cached at servers that are close in proximity to the client and the TMS (director) employs load balancing and fail-over schemes to distribute server loads and promote data redundancy across the network (col. 11, lines 24-26 and lines 40-43). Swildens does not disclose the director allocating a fixed number of valid tickets to the event or limit access to the content data. However, is well known in the art and would have been obvious to one of ordinary skill in the art to be motivated to limit access to content data because of insufficient bandwidth or lack of server power in order to keep the system from overloading or degradation of service quality.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sugita, 6,396,845; Medin, 6,370,571; Freeman et al, 6,807,580; Chaddha et al, 6,151,632; Satyavolu et al, 6,517,587; Gerszberg et al, 6,570,974 ; Waters et al, 5,841,980

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (703) 605-4299. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn

Dung C. Dinh
Primary Examiner